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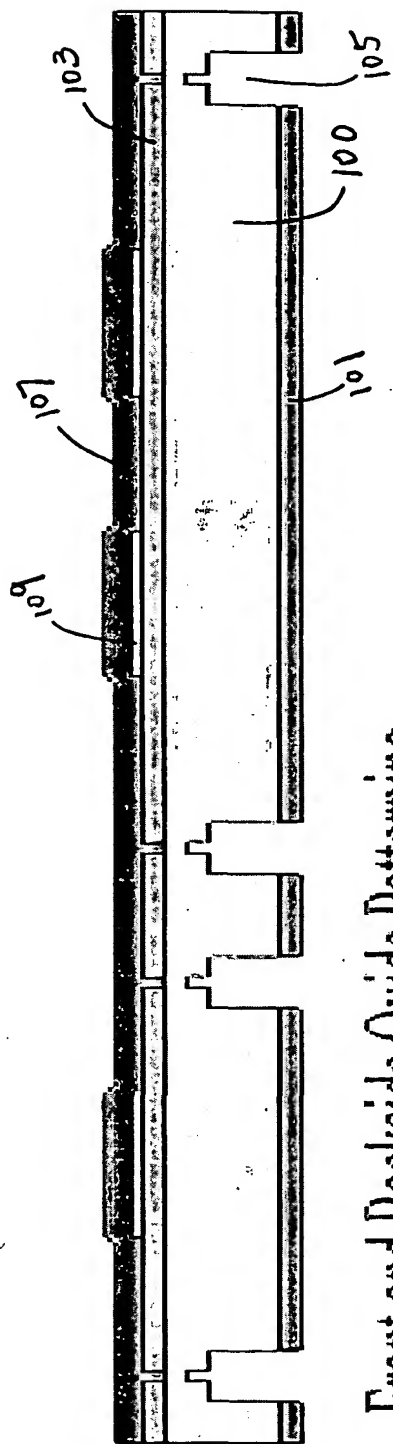
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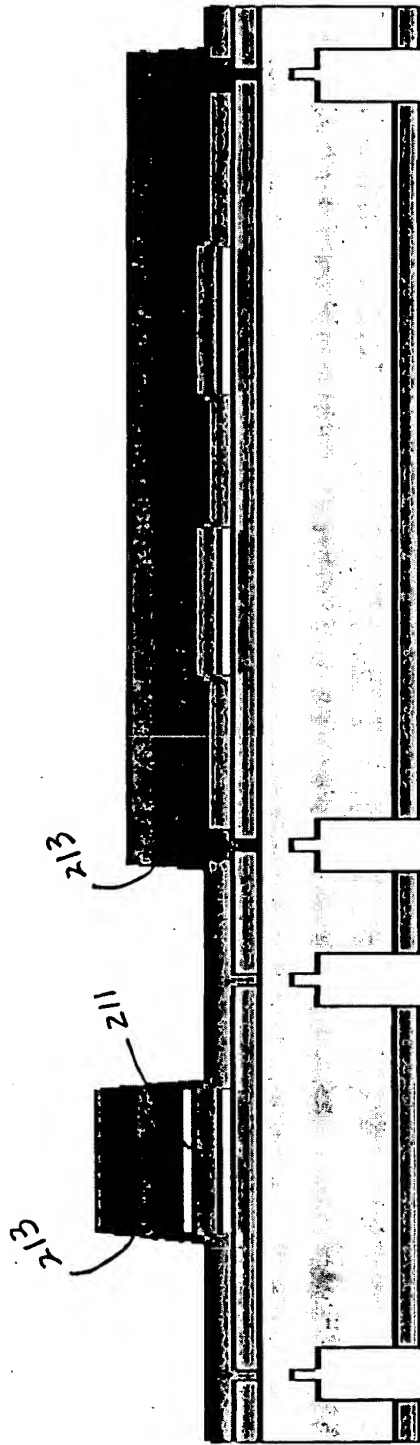
Front and Backside Oxide Patterning

Backside DRIE Etching

1st Cr/Au Deposition and Patterning (100 Å / 3000 Å)

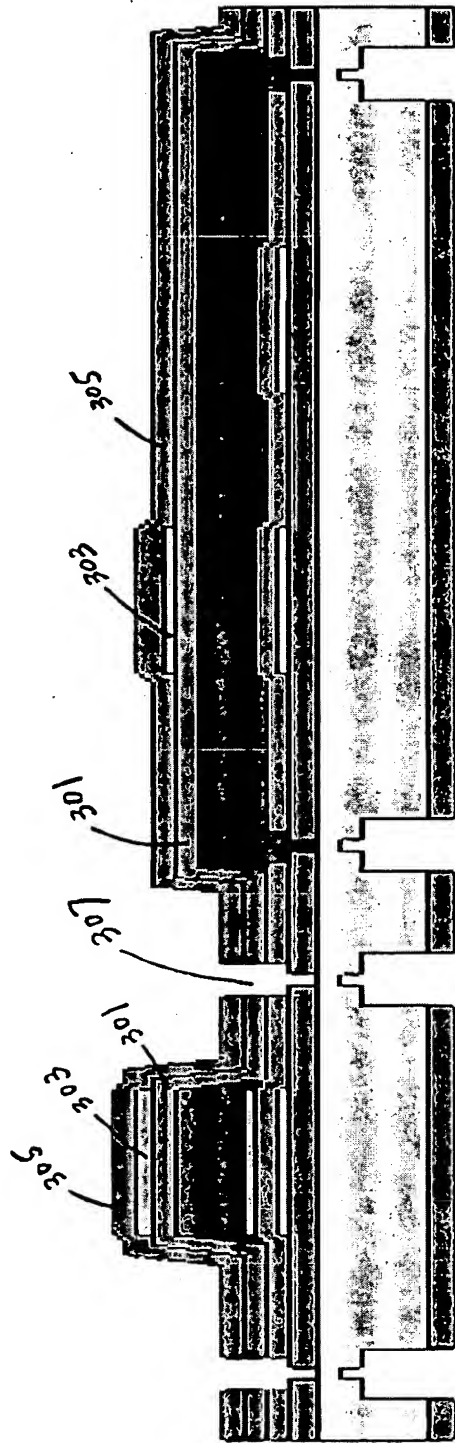
1st Parylene Deposition and Patterning (1 μm)

Fig. 1



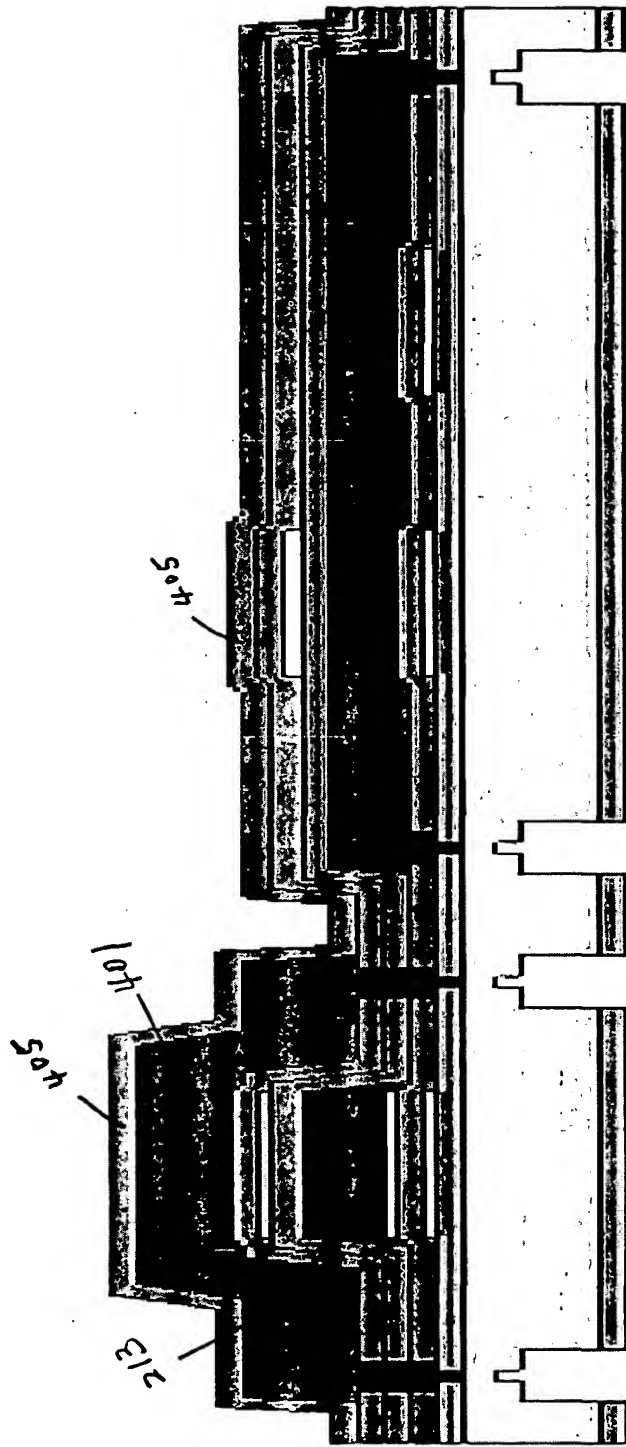
Sputter Si and Patterning (3000 Å)  
1st Sacrificial Photoresist and Patterning (4 μm)

Fig. 2



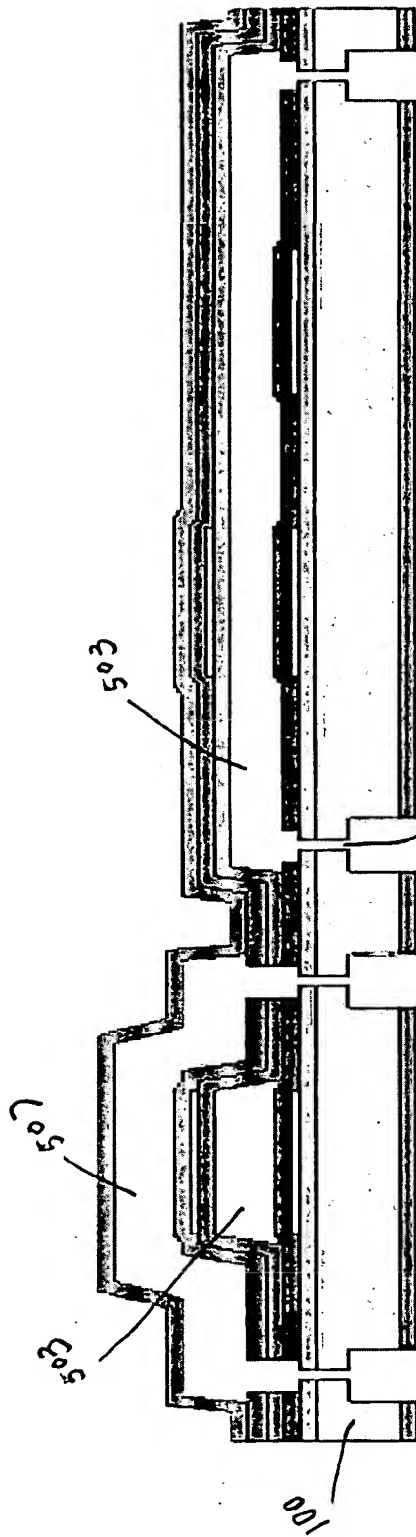
2nd Parylene Deposition and Patterning (1  $\mu\text{m}$ )  
2nd Cr/Au Deposition and Patterning (100 Å / 1500 Å)  
3rd Parylene Deposition and Patterning (1  $\mu\text{m}$ )

Fig. 3



2nd Sacrificial Photoresist Patterning (5  $\mu\text{m}$ )  
4th Parylene Deposition and Patterning (1  $\mu\text{m}$ )

Fig. 4



DRIE Open Backside Inlet and Outlet

Acetone Release Sacrificial Photoresist

BrF3 Release Sacrificial Si



Parylene Substrate Oxide 2nd Cr/Au 1st Cr/Au Photoresist Sputtered Si

Fig. 5

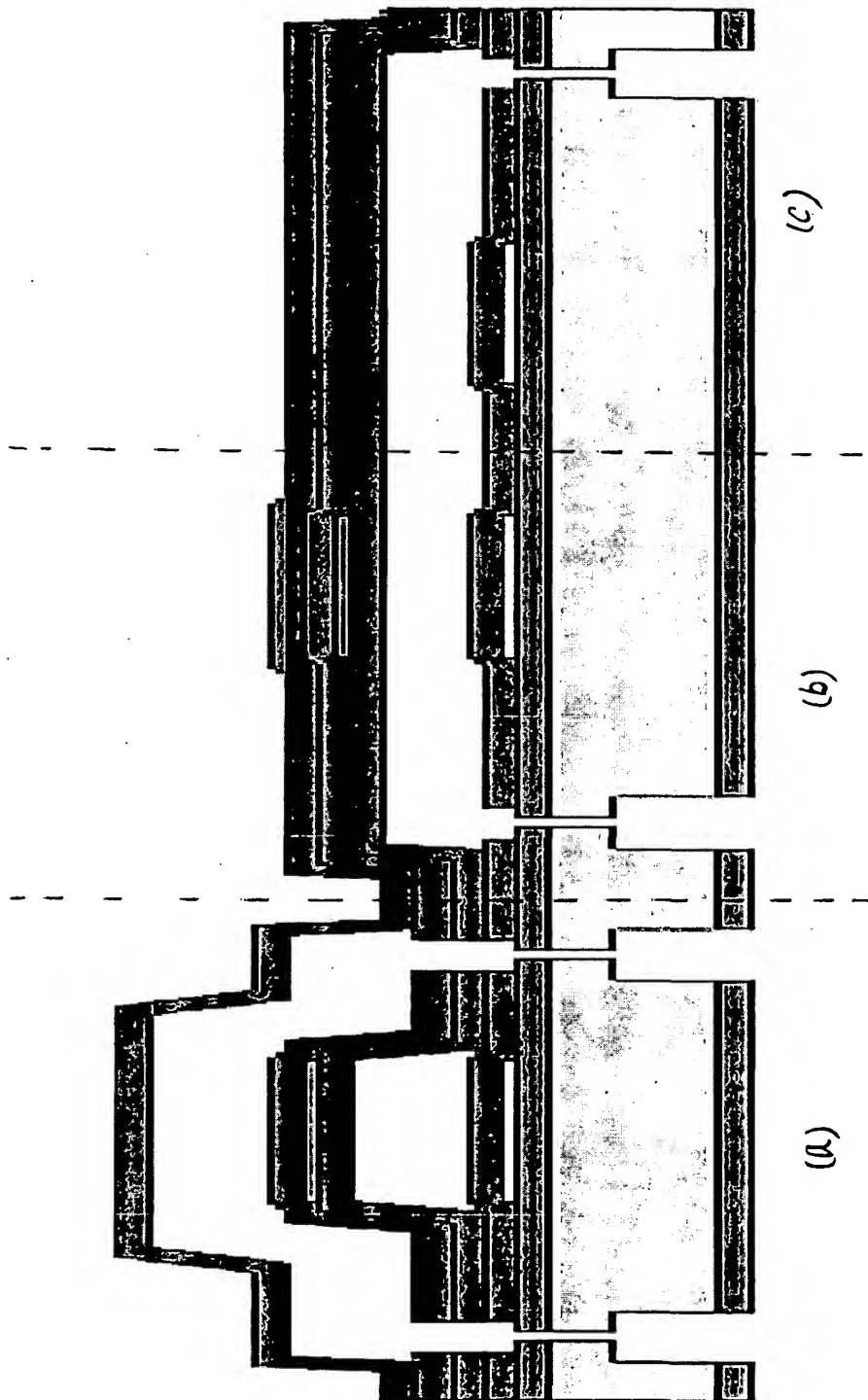


Fig. 6



Fig. 7



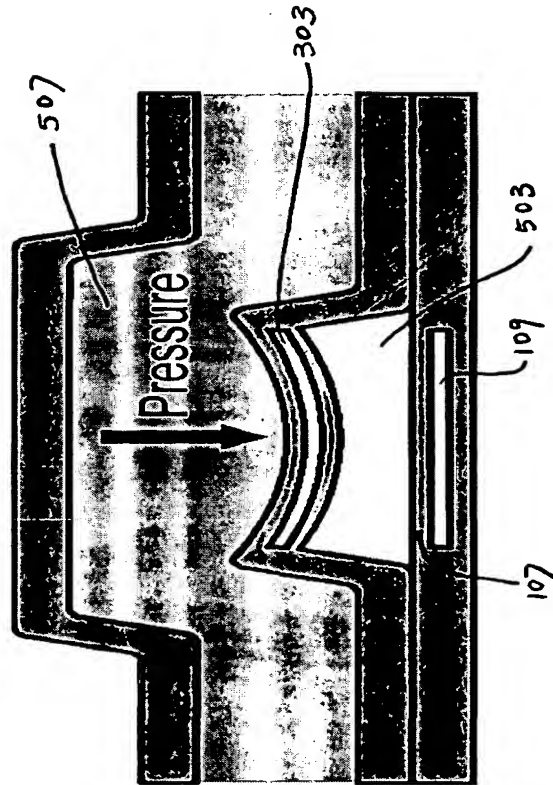


Fig. 8

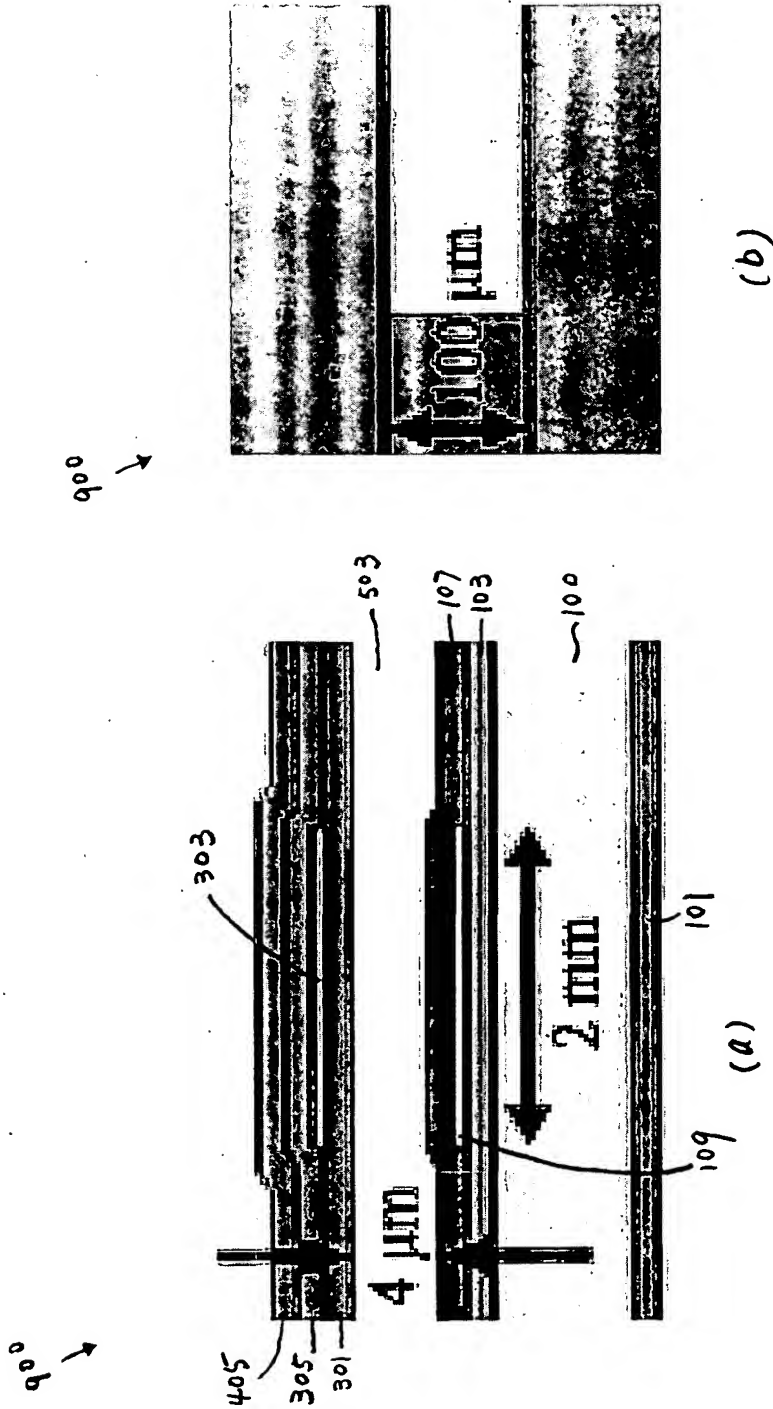


Fig 9

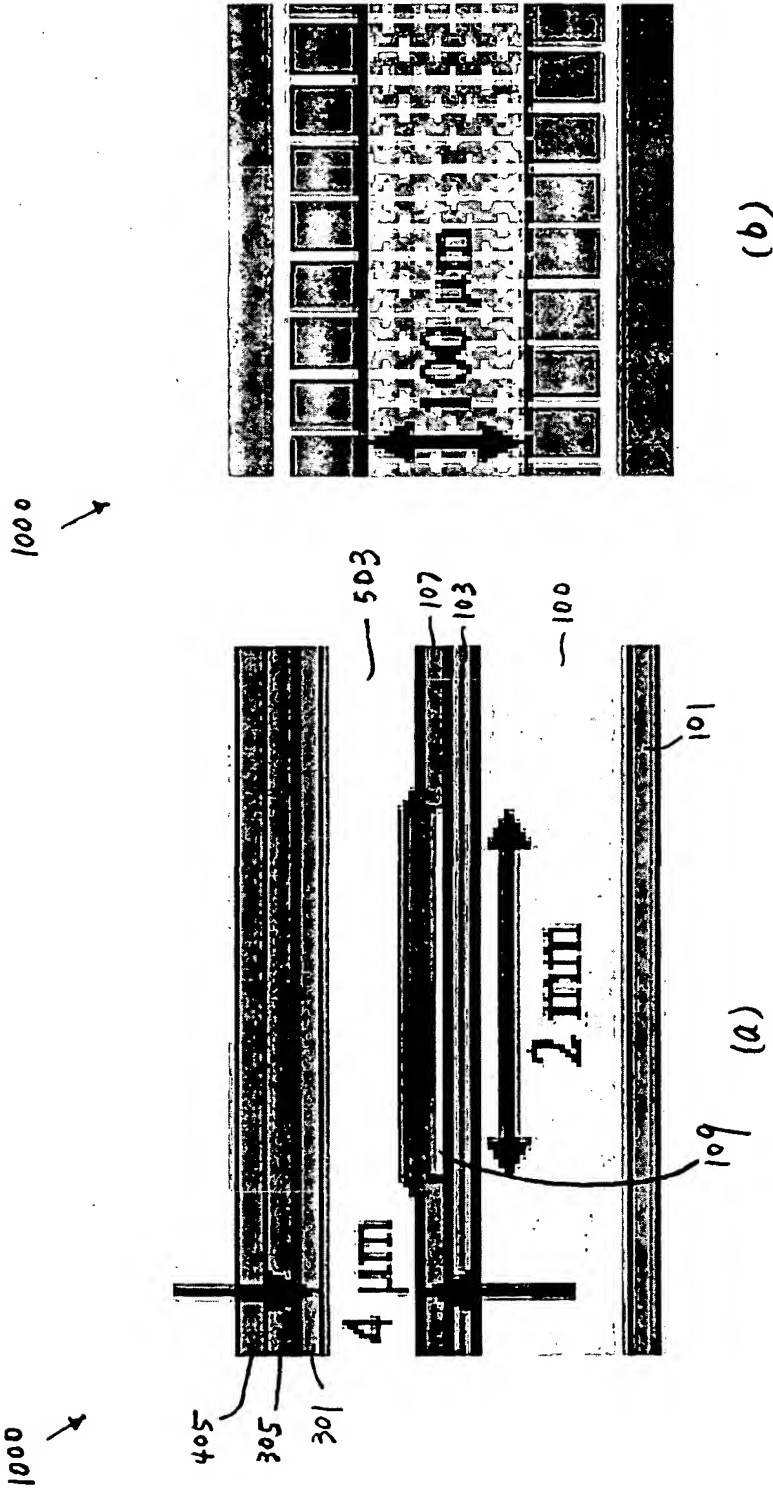


Fig 10

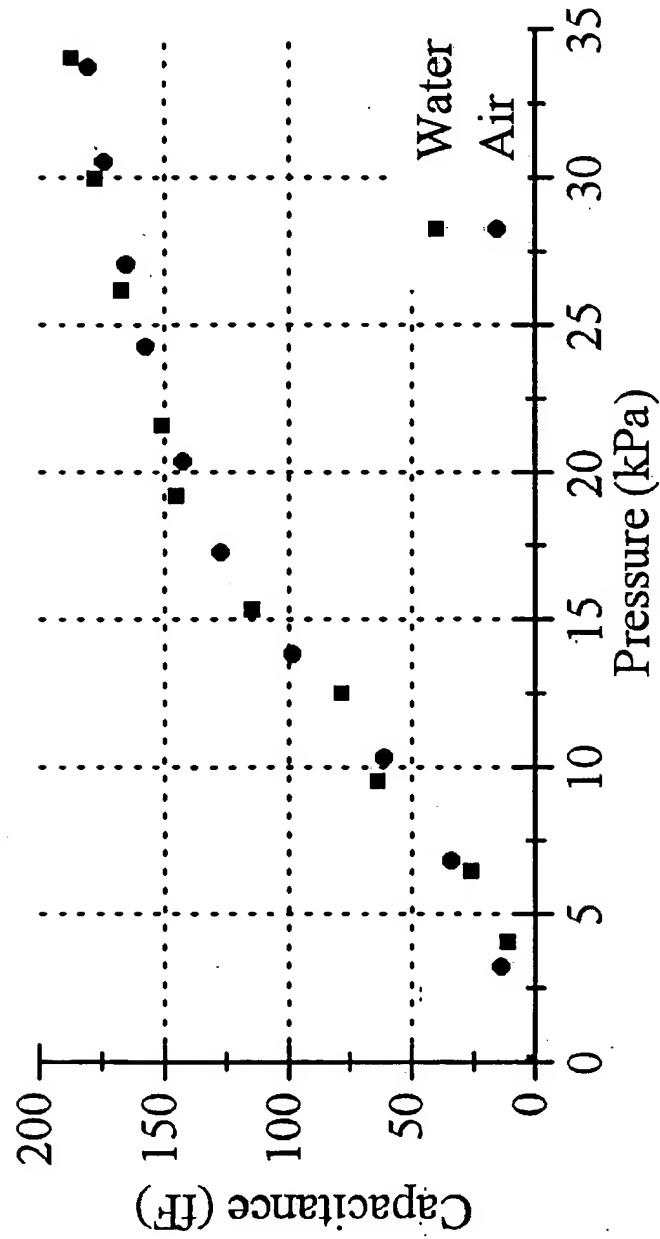


Fig. 11

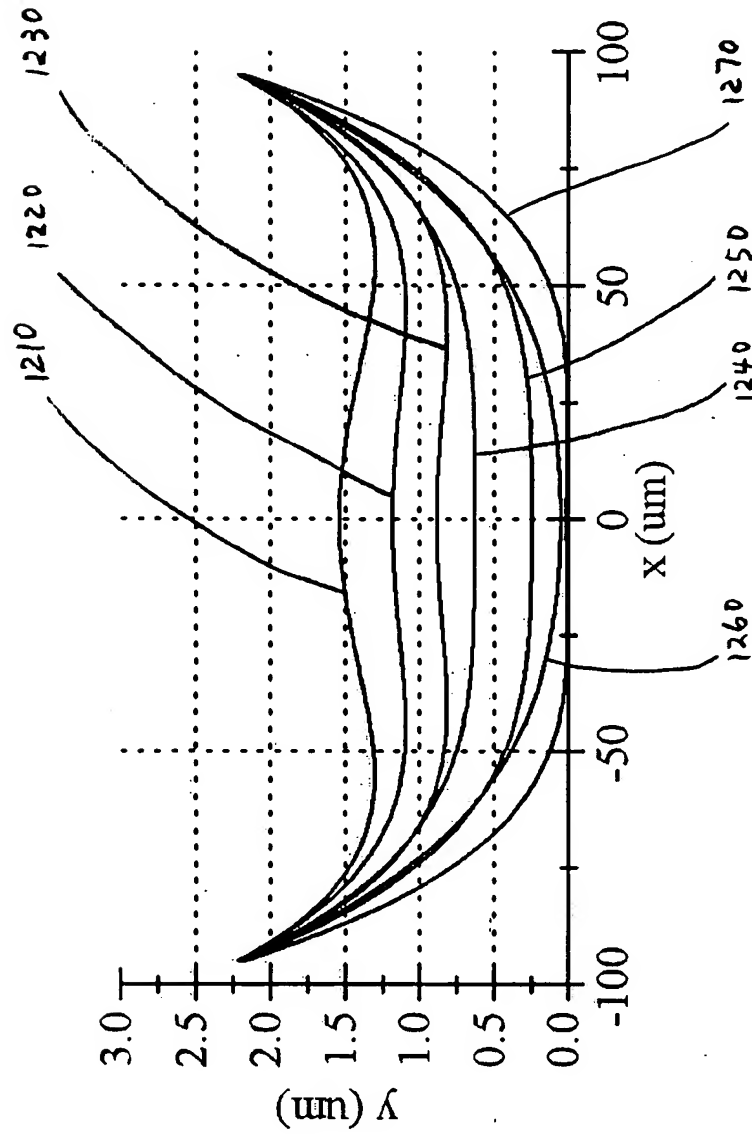


Fig 12

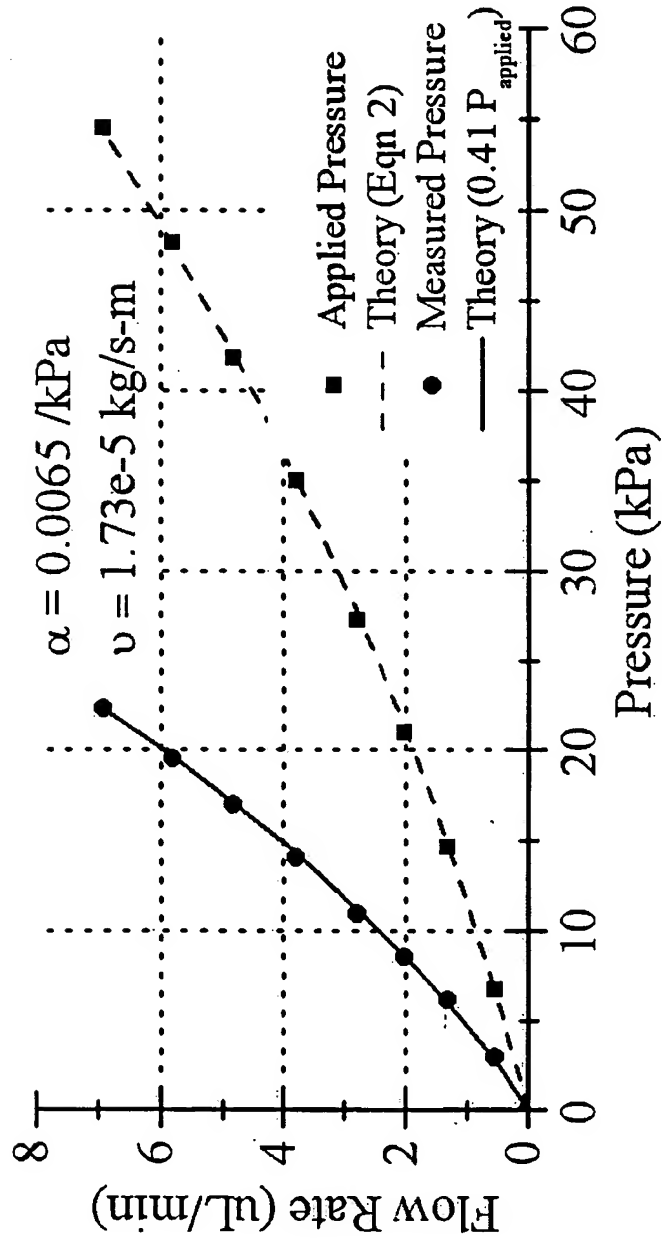


Fig. 13

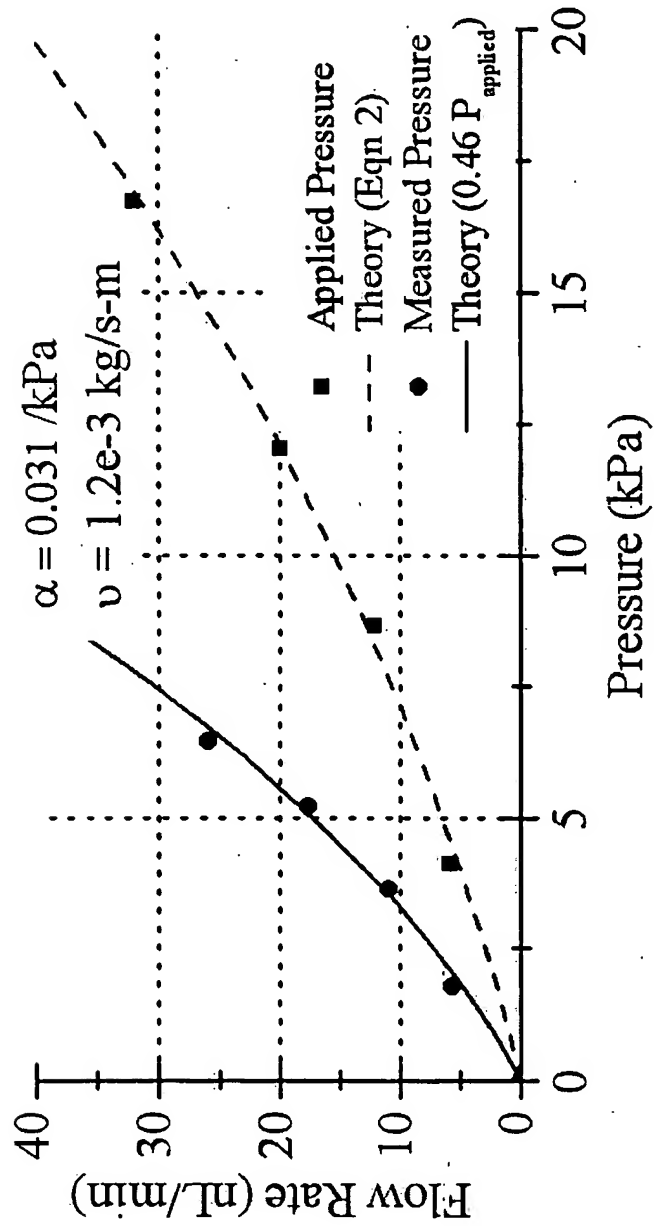


Fig. 14

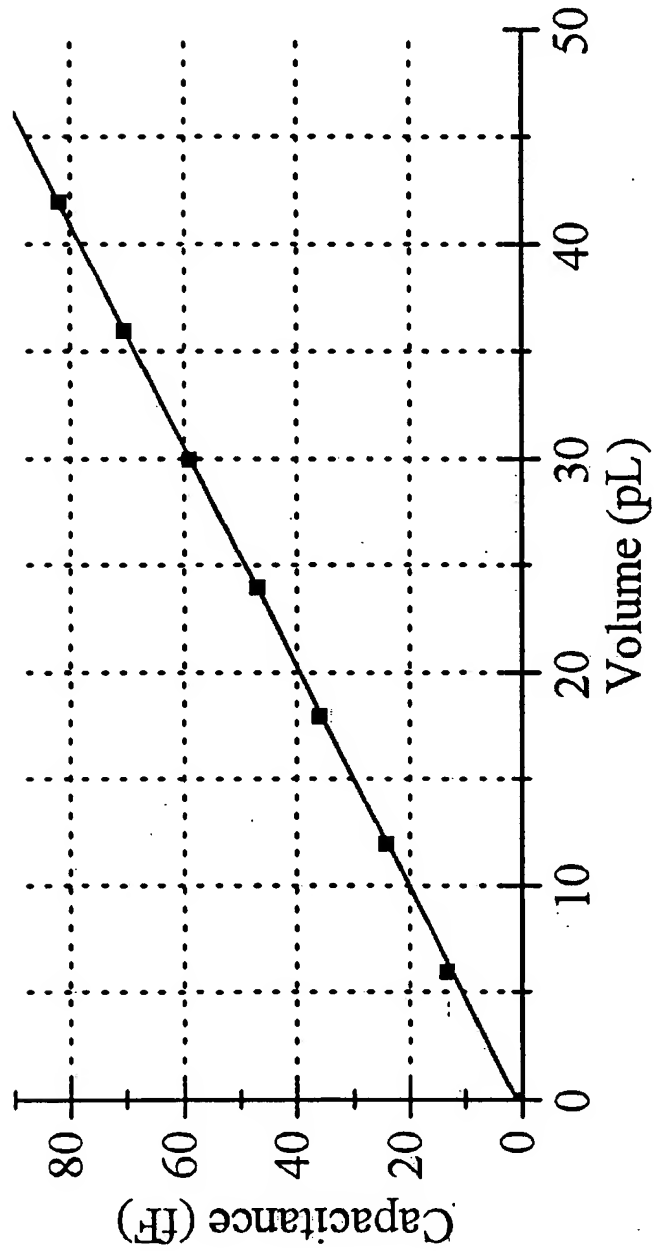


Fig. 15



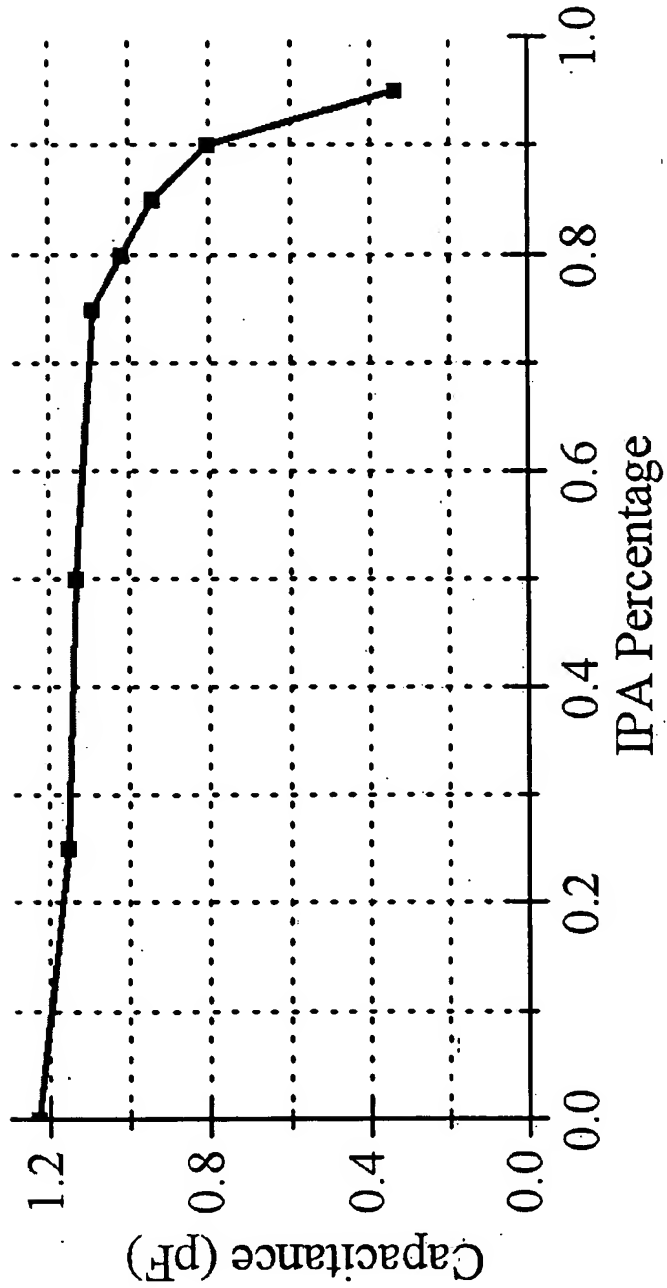


Fig. 16